Application or Docket Number

PATENT APPLICATION FEE DETERMINATION RECORD

Effective January 1, 2003

CLAIMS AS FILED - PART I (Column 1)						mn 2)	SMALL ENTITY TYPE		OR	OTHER THAN OR SMALL ENTITY	
TOTAL CLAIMS			17				RATE	FEE] [RATE	FEE
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these complications. The Individuals with Disabilities Education Improvement Act of 2004 (IDEA, 2004) recognized behavioral risk factors for pregnant women that should be addressed including prenatal exposure to substances (NECTAC, Vulnerable Young Children, 2008). Environmental risks often are cumulative; infants in high-risk environments may be exposed to multiple risk factors including chronic substantiated abuse or neglect, poverty, maternal depression, placement in the foster care systems, homelessness, and exposure to family violence. These risk factors often have physical and psychological and lifelong implications for development and growth. If these risk factors are not addressed and minimized, children are at continued risk for school failure, unsuccessful peer relations, increased and chronic health issues, inability to complete formal education, and mental health disorders (Shonkoff & Phillips, 2000).

The developing brain is vulnerable to neurotoxins including alcohol, nicotine, and cocaine. Other agents that affect brain development include infections, drugs, radiation, environmental pollutants, and chronic illness in the mother that lead to disruptions in fetal development (Haffner, 2007). The degree to which the fetus is affected depends on the timing and intensity of contact with the teratogen, factors inherent in the mother, and genetic characteristics of the fetus. Since most organs are formed between 10 and 60 days post-conception, this is generally the most vulnerable time for the fetus (Batshaw, Pellegrino, & Roizen, 2007). The presence of neurotoxicants during prenatal development can have a negative effect on the developing central nervous system. Teratogens are one of the leading causes for developmental disabilities, particularly cognitive impairment, hearing loss, and vision loss (Roizen & Johnson, 2008). The World Health Organization (2005) estimated that 30-40% of neurodevelopment disorders have environmental toxin involvement as a cause. Tobacco smoke is one of the most commonly known environmental toxins. Smoking deprives the fetus of needed oxygen and other nutrients. This might result in low birth weight or intra-uterine growth retardation, miscarriage, stillbirth, reduced lung function, and later intellectual deficits and behavioral problems (Winickoff, Van Cleave, & Oreskovic, 2010). Similarly, women who are exposed to second-hand smoke during pregnancy have a higher rate of premature births. Columbia Center for Children's Environmental Health, part of the Mailman School of Public Health at Columbia University, found that children whose mothers are exposed to second-hand smoke during pregnancy have reduced scores on tests of cognitive development at age two, when compared to children from smoke-free homes. Also, a developing fetus exposed to second-hand smoke might have an increased risk of Sudden Infant Death Syndrome (SIDS; NIH/National Cancer Institute, 2008).

Of all neurotoxins, alcohol has the most impact on the developing brain and is one of the leading preventable causes of intellectual disabilities in the United States today (Center for Disease Control, 2006). However, the use of any illicit drug (e.g., heroin and cocaine) is dangerous to the fetus and newborn. An increasing number of adults with young children are experimenting with methamphetamine and prescription drugs. Children whose parents are abusing these drugs risk long-term exposure to chemicals that could damage their nervous system, brain, lung, kidneys, liver, eyes, and skin. They also are at an increased risk for abuse and exposure to domestic violence (Virginia Department of Social Services, 2007). Unfortunately, newborns born addicted to prescription drugs must be treated with methadone to ease symptoms of withdrawal (Goodnough & Zezima, 2011). The long-term impact of methadone on infants is unknown.

In a recent policy statement, the American Academy of Pediatrics stated, "Early identification of developmental disorders is critical to the well-being of children and their families" (APP, Policy Statement on Identification of Infants and Young Children, 2010). They advocated for developmental surveillance at every well-child preventive care visit. Any concerns raised during surveillance should be promptly addressed with standardized developmental screening tests. In addition, developmental screening tests should be administered regularly at the 9-, 18-, and 30-month visits. The National

Academy for State Health Policy (ABCD III) program (2011) is charged with developing and testing sustainable models for improving care coordination between pediatric primary care providers and other providers working with young children and their families in an effort to improve the quality of care for children at-risk for developmental delay. Much of this work is done through strengthening referral systems, single points of contact, and developing linkages between agencies (National Academy for State Health Policy, 2011). DEC strongly supports universal developmental screening by pediatricians, early interventionists, early childhood special educators, and child care staff, as well as surveillance efforts to prevent and mitigate early developmental delays for children with and at risk for disabilities.

2. DEC emphasizes the need for culturally-responsive, developmentally appropriate, individualized care in affordable, safe, nurturing, and inclusive environments using evidence-based practices by qualified early childhood practitioners (i.e., early interventionists/early childhood special educators, early childhood educators, and related services providers). Practices also should be family guided and include access to evidence-based information regarding positive parenting practices that reflects varied child rearing beliefs and cultural and linguistic diversity. Family-guided, early intervention for young children at risk for developmental delay as well as infants with high risk factors (e.g., low birth weight and prematurity) that are provided in natural, least restrictive settings (e.g., homes, classrooms, child care) should be the foundation of early intervention (EI) and early childhood special education (ECSE).

DEC prioritizes the promotion of health, social, emotional, and educational outcomes for young children by increasing access to high quality care and education, and the prevention of developmental delays by ensuring equitable and appropriate access to early intervention, special education, and early preschool services for young children with or at risk for developmental delays (e.g., through EI/ECSE, Head Start, state-funded preschool programs). Professional organizations such as DEC play a key role in disseminating information to ensure families and staff understand and implement evidence-based, developmentally appropriate practices and arrange safe, nurturing and responsive environments. Dissemination efforts should be focused on ensuring that <u>all</u> families have access to safe, affordable, nurturing childcare, which is staffed by qualified professionals who implement evidence-based, developmentally appropriate practices. To ensure quality programs, efforts should focus resources on increasing the competence of the early childhood professionals by disseminating knowledge, promoting research, and influencing policy related to evidence-based, developmentally appropriate practices and the essential characteristics of high-quality environments.

Developmentally appropriate practices are compatible to the child's age, strengths, interests, and developmental status; enable children to achieve functional, generative goals; include experiences that challenge children enough to promote learning and development; and are based on empirically supported principles related to child development and learning. Caregivers and early childhood practitioners who employ developmentally appropriate practices are intentional and systematic in their use of approaches and strategies to support children's development and learning across domains. Universal practices to promote child well being include strengthening and promoting nurturing relationships among staff, children, and their families. Infants, toddlers, and young children develop within the context of their caregiving relationships (Squires & Bricker, 2007). Cultivating and sustaining nurturing relationships between caregivers and children is an essential component to the promotion of health, safety, and well being of children and the prevention and mitigating the impact of developmental disabilities.

Universal, evidence-based practices also include arranging high-quality learning environments. High-quality environments include responsive, physically stimulating, and developmentally appropriate materials and activities, enroll and serve children with a range of abilities and needs, and are safe and staffed by qualified, nurturing adults (Trivette, 2007). High quality environments provide ample opportunities for sustained engagement with peers and materials in meaningful activities and high-level play, which afford contextually relevant opportunities for developing critical thinking, language, social, emotional, motor, and problem solving skills. High-level play provides opportunities for positive social interactions with peers and adults, functional communication skills, expressions of empathy, and the development of friendships. DEC supports the efforts of states to operationalize or adopt Quality Rating and Improvement Systems (QRIS) to improve child outcomes across early care and education settings by encouraging professionals to meet higher standards within these settings and to assist parents in finding quality care (Porter, Bromer, & Moodie, 2011).

DEC recognizes the importance of promoting the acceptance and respect of parenting practices across diverse cultures. Thus, information regarding positive caregiving practices should include and support the active participation of families representing cultural and linguistic diversity. Research indicates that when child care providers and early childhood educators acknowledge and value the family's culture (including language, parenting practices, cultural mores) the relationship is strengthened (Cheatham & Santos, 2009). Culture impacts developmental expectations, ways of interacting and communicating with others, and beliefs about parenting and child rearing (Carlson & Harwood, 2000). Culturally responsive and relevant strategies include practitioner self-reflection regarding dispositions towards different viewpoints about caregiving and expectations related to child development, the practices and beliefs of all families and cultures, and commitment to listening to families about their strengths, priorities, and concerns. Parenting education (including all caregivers) should be intentionally focused on supporting families to feel more secure in the relationship with the early interventionists, child care staff, early childhood teachers, early childhood special educators, and related practitioners (Parlakian & Seibel, 2002). A goal of parenting education should be to enhance family capacity to teach and nurture their children and promote their learning and development. Parent educational supports and practices are guided by a framework to strengthen existing competencies, promote family participation, and encourage joint decision-making (Dunst & Dempsey, 2007). Practitioners focus on building rapport and strengthening the relationship with <u>all</u> family members through active listening about expectations, empathy, and positive, constructive feedback that promotes caregiver self-efficacy and competence (Dunst, Trivette, & Hamby, 2006). When working with families who are culturally or linguistically diverse, early interventionists may utilize cultural brokers who also might act as interpreters to help facilitate the early intervention supports and services.

DEC strongly believes that early intervention for infants, toddlers, and young children at risk or with disabilities should be family-guided and provided in natural and least restrictive settings within daily routines and activities. Early intervention includes the identification of family and environmental risk and opportunity factors and child developmental strengths, delays, or concerns. The underlying principles of early intervention are that children learn most efficiently and effectively through everyday experiences with familiar adults within familiar routines and activities, and that all families can support their child's learning and development given the necessary supports and resources. As mentioned above, the goal of EI and ECSE services should be to enhance the capacity of caregivers by using a strength-based, collaborative approach. Early interventionists should identify the family's priorities and concerns within the context of the family's daily routines and activities (McWilliam, 2002). Likewise, if the child spends a good portion of the day in child care or classroom settings, service and supports should be provided in collaboration with the child care providers within the center's daily routines and activities. Early intervention should support the child and family's participation in daily routines, activities, and communities (Roggman, Boyce, & Innocenti, 2008). Effective practitioners use evidence-

based practices for gathering information and providing support to families. They collaboratively identify learning opportunities within the family's typical routines using the family's toys and materials and build on the natural caregiver-child interactions and enhance the caregivers' responsive interactional style (Powell & Dunlap, 2010; Dunst & Kassow, 2008). Also, effective practitioners implement evidence-based adult learning and coaching strategies to support caregivers' capacity to embed learning opportunities throughout the day to help the child achieve identified goals and objectives (McWilliam, 2000). Practitioners focus on supporting families in enhancing their child's development rather than only providing direct services to the child. This ensures the child receives maximum amounts of intervention and meaningful instructional opportunities throughout the day within familiar activities and routines by familiar caregivers (Jung, 2003). Practitioners provide three types of support to families: emotional (e.g., positive affect, responsiveness, sensitivity), material (e.g., community resources, necessary equipment), and informational (e.g., about their child's disability, developmental expectations) (McWilliam, 2010). DEC seeks to support and sustain efforts to promote pre-service and in-service training on effective early intervention, research on evidence-based practices for working with families with young children, policies and legislation to support family-guided early intervention, and dissemination of information about best practices with children and families (Sandall, Hemmeter, McLean, & Smith, 2005).

3. Correctly administered, ethical, valid, reliable, culturally sensitive, formal and informal assessments should be administered to ensure accurate identification of the child's and family's strengths, appropriate individualization of children's learning to fit each child's needs, and the child's current level of development and progress. Supporting young children through research that evaluates early intervention screening, diagnosis, and program planning aimed at minimizing risk factors and strengthening child and family capacity is essential.

To prevent social, emotional, cognitive disabilities, and promote health, safety and well being of young children with or at risk of disabilities or developmental delays, DEC supports gathering of information from multiple sources using evidence-based methods by the child's IFSP or IEP team to determine eligibility, identify a child's current level of functioning, assess the need for additional or revised interventions, and plan and evaluate interventions. Assessment tools and methods must provide published information about psychometrics including validity and reliability information related to the purpose of the assessment (i.e., screening, diagnostic evaluation, program planning, and progress monitoring; Bagnato, Neisworth, & Pretti-Frontczak, 2010). A developmentally appropriate assessment should meet eight "critical" criteria: usefulness, acceptability, authenticity, collaboration, equity, sensitivity, convergence, and congruence (Neisworth & Bagnato, 2005). Given the limitations of standardized tests in early childhood (Bagnato, McLean, Macy, & Neisworth, 2011), collection and use of authentic data from a variety of sources is recommended (e.g., parent report, observation, routinesbased notes). Guidelines for curriculum, assessment, and program evaluation in the field of early childhood can be found in DEC Promoting Positive Outcomes for Children with Disabilities, a companion document to the joint position statement by NAEYC, and the National Association of Early Childhood Specialists in State Departments of Education (NAECS/SDE).

Early childhood professionals must understand the effects of culture and language on home environments, learning, and social relationships to assess children and their families in a culturally responsive manner (Banerjee & Guiberson, 2012). Thus, assessment practices should be responsive to the family's values, communication style, and expectations, both when administering assessments and collecting information about families' concerns, priorities, and resources. Language differences and literacy levels of the families should be considered when collecting information and reporting assessment results.

DEC emphasizes family and caregiver participation in the assessment process. DEC also recognizes the importance of the family and community in each child's development and learning. Besides identifying specific concerns, families and caregivers bring a unique perspective on children's functioning level and performance within natural and least restrictive environments and daily routines. Collaborative assessment methods using multiple sources of information, encouraging active parental and caregiver participation, conducted in natural and least restrictive settings during routines provide authentic information about the child's strengths and needs and guide intervention planning.

Appropriate pre-service and in-service training including instruction related to family-centered assessment practices and opportunities to practice administering authentic assessments must be provided to early childhood professionals. Training in multidisciplinary collaboration, selection of the "right" purpose to make programmatic decisions guided by evidence, and culturally sensitive assessment practices, is a key to preparing effective professionals who collect meaningful assessment information and link the assessment information to instruction and intervention. Institutions of higher education must prepare pre-service teachers to understand and practice the DEC and NAEYC guidelines for assessment. A meeting with the assessment team is the first experience a family may have with early intervention. Administrators need to ensure a qualified team, guided by the eight qualities of assessment mentioned above, works with families to administer authentic, culturally sensitive assessments in appropriate settings.

4. High quality systems of pre-service and in-service professional development focused on training in evidence-based, family-centered practices for working with young children and their families to minimize risk factors and strengthen child and family capacity in inclusive, natural, and least restrictive settings are essential. Ongoing professional development for early childhood professionals ensures better understanding of child development, provides support for reporting developmental concerns, and teaches strategies for talking with families about difficult topics.

DEC prioritizes establishing and sustaining high quality systems of pre-service and in-service professional development for early childhood professionals. Effective professional development should be designed and delivered based on the characteristics of the participants and content, and include relevant, highquality learning experiences (National Professional Development Center on Inclusion, 2008; Snyder, Hemmeter, & McLaughlin, 2011). Professional development should consist of training in implementing evidence-based, developmentally appropriate, family guided practices for working with young children and their families. Professional development goals and strategies should focus on minimizing risk factors and strengthening child and family capacity and participation in inclusive, natural, and least restrictive settings that promote health, safety and overall development of learning in young children. Baker-Ericzen, Mueggenborg, and Shea (2009) found that intentional, systematic training on evidence-based practices for promoting inclusion was related to positive changes in attitudes and perceived competence toward inclusion for professionals. This study's findings demonstrate the benefits of training when professionals are already working in the field. However, effective professional development also should be provided at the pre-service level, as the benefits are likely to be sustained over time when the preservice program includes systematic coursework and field experiences in evidence based strategies for working in inclusive settings. Yet, more than 40% of early childhood, bachelor-level teacher preparation courses or practicum experiences do not provide a course or specific information on working with children with and at-risk for disabilities (Chang, Early, & Winton, 2005). In an in-depth study of early education care and quality, Early et. al. (2007) surveyed pre-service programs and found programs varied in quality. Their study had four important conclusions: (1) some were relatively new programs; (2) they were typically small and unfunded; (3) some changed their focus recently; (4) many experienced huge enrollment increases in many places related to degree mandates. It is imperative that early

intervention/early childhood special education programs work within their state system to ensure quality early childhood placement for all children. DEC supports an increased focus on embedding evidence-based practices in inclusive settings and an emphasis on preparing professionals to work within those settings.

Pre-service programs also should include coursework and experiences related to collaboration with colleagues and families and working with families and professionals representing cultural and linguistic diversity. Coursework should provide opportunities for understanding typical and atypical child development, learning and practicing family centered strategies, providing embedded instructional opportunities, and individualized instruction and adaptations (Chandler & Maude, 2008; Odom, et al., 2002; Sandall & Schwartz, 2008; Trivette & Dunst, 2004; Wolery, 2005). Professional development should include content and experiences with children and families with a variety of strengths and needs (Stayton & Miller, 2008). This ensures practitioners will be able to identify concerns as early as possible and refer children and families for early intervention when appropriate. Family-centered practices include strategies to collaborate with families and caregivers to develop goals and design instruction, strengthen family capacity to deliver instruction within routines and activities based on the family's strengths and priorities, and discuss difficult topics in a responsive, culturally relevant manner (Barrera & Corso, 2002; Dunst, 2004). Embedded instruction refers to planning and delivering contextually relevant instruction within daily routines and activities (Snyder, 2005; Wolery, 2005). Individualized instruction and adaptations are designed and delivered based on the unique goals and characteristics of individual children with and without special needs. All three of these components (i.e., family centered practices, embedded instruction, and individualized instruction and adaptations) are evidence-based practices related to positive outcomes for children and families (Chandler & Maude, 2008). Across both pre-service and in-service professional development, content should be delivered in a variety of formats (e.g., readings, lectures, role play, video, discussion, practice, and coaching) representing the roles that participants will or do have within early childhood settings (Chandler & Maude, 2008). DEC supports the use of coaching and performance-based written and oral feedback within systems of professional development, as professional development without follow-up coaching or feedback is largely ineffective (Fixsen, Naoom, Blase, Friedman & Wallace, 2005; Joyce & Showers, 2002; Winton & McCollum, 2008). Coaching and feedback should provide participants opportunities to discuss, engage in self-reflection, and receive performance-based feedback (Snyder & Wolfe, 2008). Many states are engaged in crosssector professional development systems focused on evidenced-based practices in an effort to sustain and scale-up effective professional development (Pianta, Hamre, & Hadden, 2012).

5. Advocacy efforts should focus on public regulations and policies for supporting the provision of services for all young children in safe, healthy environments by qualified practitioners implementing evidence based -practices. Establishing and sustaining systems of interagency collaboration is required to effectively meet the needs of children and families.

Empowering families to effectively advocate for themselves and their child during the first few years of their child's life might enhance the family's ability to make decisions and interact with different social and educational systems to best support their child's development. DEC encourages and champions advocacy efforts on an individual, local, state, and national level. DEC's Children Action Network (CAN) works to shape policy by providing feedback on current and upcoming legislation, regulations, and funding. Nationally, DEC works with other organizations such as the National Association for the Education of Young Children (NAEYC) to promote developmentally appropriate practice and provide guidance on inclusion. DEC also supports and advocates for the use of evidenced based practices through the dissemination of DEC Recommended Practices.

DEC strives to work at the local and regional level through the CAN coordinator and state and provincial affiliate members to raise awareness and provide feedback on local policy decisions. Professionals working with young children with disabilities and children at risk for developmental delays hold a unique perspective. It is imperative that they share their experiences with policy makers (LaRocco & Bruns, 2005). The DEC Code of Ethics (2009) clearly identifies advocacy as an everyday practice to which professionals should

"...serve as advocates for children with disabilities and their families and for the professionals who serve them by supporting both policy and programmatic decisions that enhance the quality of their lives...continually be aware of issues challenging the field of early childhood special education and advocate for changes in laws, regulations, and policies leading to improved outcomes and services for young children with disabilities and their families.... advocate for equal access to high quality services and supports for all children and families to enhance their quality of lives." (pp. 1-3)

Staying informed about key issues through newsletters and email alerts, building and maintaining relationships with policy makers, and sharing perspectives through phone calls, email, or personal visits with elected officials are three significant ways that professionals and family members can act at a local, state, and national level. (LaRocco & Bruns, 2005). Advocacy efforts should be coordinated and aligned with the interests of other key early childhood partners involving Head Start; Early Head Start; mental health; state and local home visiting programs; Women, Infants, and Children (WIC) Program; developmental disabilities programs; social work; state legislators; program administrators; child protective services; pediatricians; early interventionists and special educators; and related specialists. Many of these early childhood partners may already be participating in their state interagency coordinating council (SICC) or local interagency coordinating council (LICC), a natural avenue for coordinating efforts.

Beyond traditional efforts of coordination as framed by IDEA through state and local interagency councils, professionals should be cognizant of the vast and disparate settings in which the care and education of young children occur, and the increasing numbers of children in child care or early childhood education. From 2002-2011, state public preschool programs have doubled the amount of children served (Barnett, Carolan, Fitzgerald, & Squires, 2011). To provide effective services to families and children at risk, early interventionists and early childhood providers can and should connect to the broader home visiting and child care communities to coordinate the delivery of preventive, evidence-based programs, and services that produce positive outcomes for children and families. Child care resource and referral advisory boards, parent advocacy organizations, state chapters of professional organizations (e.g., NAEYC, DEC), are all additional avenues to increase coordination of broader advocacy efforts to improve the lives of all young children and their families.

6. DEC supports research that focuses substantial attention and resources to identifying effective and efficient systems and strategies for the prevention of disabilities by timely and appropriate intervention in health, well being, and safety of young children and their families.

The EI/ECSE field has evolved such that a set of social valid practices exists. DEC Recommended Practices (Sandall, Hemmeter, Smith & McLean, 2005) were developed from three important sources of information. First, they are research-based practices that lead to high quality, effective learning experiences for young children with and at-risk for disabilities. Second and third, the practices represent the collective wisdom and values of families and providers of early intervention and early childhood special education. These practices are based on the belief that high quality caregiving environments and experiences are important for all children. However, continued research is needed examining effective

practices for ensuring children and families have access to and receive evidence-based practices. Over the last several years, several studies have identified the severe and persistent gap between research and practice (e.g., Dunst & Trivette, 2009; Odom, 2009; Stahmer, 2007).

Thus, research efforts need to focus on effective policies, professional development, and service delivery systems to ensure all children and families receive evidence-based supports (Dunlap & Fox, 2011). This includes examining the relations between access to high-quality services, child and family outcomes, and cost (Hebbeler, Spiker, & Kahn, 2011). Likewise, the following are specific areas where additional research related to young children is needed: effective home visiting, family coaching, and parent education practices (Kaiser & Roberts, 2011; McWIlliam, 2012); issues of implementation fidelity (Brown & Conroy, 2011; Odom, Buysse, & Soukakou, 2011; Strain & Bovey, 2011); non-responders to evidence-based treatments (Strain, Barton, & Schwartz, 2011); family quality of life (Strain et al.); effective professional development components (Synder et al., 2011); the efficiency of known evidence-based practices (Wolery & Hemmeter, 2011); and data-based approaches to early identification and response to intervention (Greenwood, Carta, & McConnell, 2011). DEC supports continued research efforts related to the individual and unique needs of young children with and at-risk for disabilities and their families in early childhood settings.

Document History

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REPLACES DEC's Position Statement: Prevention of Social, Emotional, Physical and Cognitive Disabilities and the Promotion of Health, Safety and Well-Being (August 2007).

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References

- Bagnato, S. J., Neisworth, J. T., Pretti-Frontczak, K. (2010). LINKing authentic assessment and early childhood intervention: Best measures for best practices (4th Ed.). Baltimore, MD: Paul H. Brookes.
- Bagnato, S. J., McLean, M., Macy, M., & Neisworth, J. T. (2011). Identifying instructional targets for early childhood via authentic assessment: Alignment of professional standards and practice-based evidence. *Journal of Early Intervention*, *33*, 243-253. doi:10.1177/1053815111427565.
- Baker-Ericzén, M. J., Mueggenborg, M. G. & Shea, M. (2009) Impact of trainings on child care providers' attitudes and knowledge on inclusion: What factors are associated with change? *Topics in Early Childhood Special Education*, 28, 196-208.
- Barnett, W. S., Carolan, M. E., Fitzgerald, J., & Squires, J. H. (2011). *The state of preschool 2011: State preschool yearbook*. New Brunswick, NJ: National Institute for Early Education Research.
- Barrera, I., & Corso, R. (2002). Cultural competency as skilled dialogue. *Topics in Early Childhood Special Education*, 22, 103-113.
- Barrera, I., Corso, R., & Macpherson, D. (2003). *Skilled dialogue: Strategies for responding to cultural diversity in early childhood.* Baltimore: Paul H. Brookes.
- Batshaw, M. L., Pellegrino, L., & Roizen, N.J. (2007). *Children with disabilities* (6th Ed.). Baltimore: Paul H. Brookes.
- Brown, W. H., & Conroy, M. A. (2011). Social emotional competence in young children with developmental delays: Our reflection and vision for the future. *Journal of Early Intervention*, *33*, 310-320.
- Carlson, V. J., & Harwood, R.L. (2000). Understanding and negotiating cultural differences concerning early developmental competence: The six raisin solution. *ZERO TO THREE Bulletin of the National Center for Infants, Toddlers, and Families, 20,* 19-24.
- Centers for Disease Control and Prevention. (2006). *Fetal alcohol information*. Retrieved from http://www.cdc.gov/ncbddd/fas/faqs.htm.
- Centers for Disease Control and Prevention. (2008). Use of supplements containing folic acid among women of childbearing age. *MMWR*; 57(01), 5-8. 1. Retrieved from www.cdc.gov/datastatistics/2008/folicAcid.
- Chandler, L., & Maude, S. (2008). Teaching about inclusive settings and natural learning environments. In Winton, J.A. McCollum, & C. Catlett (Eds.), *Practical approaches to early childhood professional development: Evidence, strategies, and resources* (pp. 207–225). Washington, DC: Zero to Three.
- Chang, F., Early, D., & Winton, P. (2005). Early childhood teacher preparation in special education at 2-and 4-year institutions of higher education. *Journal of Early Intervention*, *27*, 110-124.
- Cheatham, G. A., & Santos, R. M. (2009). "Why won't they just cooperate?" Understanding how cultural values impact how we team with families. In C. Peterson, L. Fox & A. Santos (Eds.), *Young Exceptional Children Monograph Series 11*, Quality Inclusive Services in a Diverse Society (pp. 107-121). Missoula, MT: Council for Exceptional Children Division for Early Childhood.
- Division for Early Childhood (DEC) of the Council for Exceptional Children (CEC). (2009). *DEC code of ethics*. Retrieved from http://www.dec-sped.org.
- Division for Early Childhood (DEC). Promoting positive outcomes for children with disabilities:

 Recommendations for curriculum, assessment, and program evaluation. Missoula, MT: DEC.
- Dunlap, G. & Fox, L. (2011). Functions-based interventions for children with challenging behavior. *Journal of Early Intervention*, *33*, 333-343.
- Dunst, C. J. (2004). An integrated framework for practicing early childhood intervention and family support. *Perspectives in Education*, 22(2), 1-16.
- Dunst, C.J. & Dempsey, I. (2007). Family/professional partnerships and parenting competence, confidence and enjoyment. *International Journal of Disability, Development and Education, 54*,

- 305-318.
- Dunst, C. J., & Kassow, D. Z. (2007). Characteristics of interventions promoting parental sensitivity to child behavior. *Winterberry Research Syntheses 1, 13*. Asheville, NC: Winterberry Press.
- Dunst, C. J., Trivette, C. M., & Hamby, D. W. (2006). Family support program quality and parent, family and child benefits. *Winterberry Monograph Series. Asheville, NC: Winterberry Press.*
- Dunst, C. J. & Trivette, C. M. (2009). Research evidence to inform and evaluate early childhood intervention practices. *Topics in Early Childhood Special Education*, *29*, 40-52.
- Early, D.M., Maxwell, K.L., Burchinal, M., Alva, S., Bender, R.H., Bryant, D., Cai, K., Clifford, R.M., Ebanks, C., Griffin, J.A., Henry, G.T., Howes, C., Iriondo-Perez, J., Jeon, H., Mashburn, A.J., Peisner-Feinberg, E., Pianta, R.C., Vandergrift, N., & Zill, N. (2007). Teachers' education, classroom quality, and young children's academic skills: Results from seven studies of preschool programs. *Child Development*, *78*(2), 558-580.
- Fixsen, D., Naoom, S., Blase, K., Friedman, R., & Wallace, F. (2005). *Implementation research: A synthesis of the literature* (FMHIPublication #231). Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network.
- Gharib, H., Tuttle, R. M, Baskin, H. J., Fish, L. H., Singer, P. A., McDermott, M. T. (2005). Consensus Statement #1.Subclinical Thyroid Dysfunction: A joint statement on management from the American Association of Clinical Endocrinologists, the American Thyroid Association, and The Endocrine Society. *Thyroid*, 15, 24-28.
- Goodnough, A., & Zezima, K. (2011). Newly born, and withdrawing from painkillers. Retrieved from the New York Times. http://www.nytimes.com/2011/04/10/us/10babies.html
- Greenwood, C. R., Carta, J. J., & McConnell, S. (2011). Advances in measurement for universal screening and individual progress monitoring of young children. *Journal of Early Intervention*, *33*, 254-267.
- Haffner, W. H. J. (2007). Development before birth. In M. L. Batshaw, L. Pellegrino, & N.J. Roizen (Eds.). *Children with disabilities* (6th ed., pp. 23-33). Baltimore: Paul H. Brookes.
- Hebbeler, K., Spiker, D., & Kahn, L. (2011). Individuals with Disabilities Education Act's early childhood programs: Powerful vision and pesky details. *Topics in Early Childhood Special Education, 31,* 199-207.
- Johnson, K., Posner, S., Biermann, J, & Cordero, J.F. (2010). Recommendations to Improve Preconception Health and Health Care United States: A Report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. Rep. no. 55(RR06). Washington, DC, 2006. Centers for Disease Control and Prevention, retrieved from the web. http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5506a1.htm
- Joyce, B., & Showers, B. (2002). *Student achievement through staff development (3rd Ed.).* Alexandria: ASCD.
- Jung, L. A. (2003). More *is* better: Maximizing natural learning opportunities. *Young Exceptional Children,* 6(3), 21-27.
- Kaiser, A. P. & Roberts, M. Y. (2011). Advances in early communication and language intervention. *Journal of Early Intervention, 33,* 298-309.
- LaRocco, D., & Bruns, D. (2005). Advocacy is only a phone call away: Strategies to make a difference on behalf of children and their familes. *Young Exceptional Children*, 8(4) 11-18.
- Misra, D. P., Grason, H., & Weisman, C. (2000). An intersection of women's and perinatal health: The role of chronic conditions. *Women's Health Issues*. *10*(5), 256-267.
- McWilliam, R. A. (2012). Implementing and preparing for home visits. *Topics in Early Childhood Special Education*, *31*, 224-231.
- National Academy for State Health Policy. (2011). Assuring Better Child Health and Development (ABCD) Porgram, *About ABCD*. Retrieved from http://www.nashp.org/abcd-history.
- Neisworth, J. T., Bagnato, S.J. (2004). The mismeasure of young children: The authentic assessment alternative. *Infants and Young Children*, *17*(3),198-212.

- Neisworth, J. T., & Bagnato, S.J. (2005). DEC recommended practices: Assessment. In S. Sandall, M.L. Hemmeter, B.J. Smith, M.E. McLean, (Eds), *DEC recommended practice: A comprehensive guide for practical application in early intervention/early childhood special education* (pp. 45-70). Missoula, MT: DEC.
- Odom, S. L. (2009). The tie that binds: Evidence-based practice, implementation science, and early intervention. *Topics in Early Childhood Special Education*, *29*, 53-61.
- Odom, S. L., Schwartz, I. S., & ECRII Investigators. (2002). So what do we know from all this? Synthesis points of research on preschool inclusion. In S. L. Odom (Ed.), *Widening the circle including children with disabilities in preschool programs* (pp. 154-174). New York: Teachers College Press.
- Odom, S. L., Buysse, V., & Soukakou, E. (2011). Inclusion for young children with disabilities: A quarter century of research perspectives. *Journal of Early Intervention*, *33*, 344-356.
- Parlakian, R., & Seibel, N. L. (2002). *Building strong foundations: Practical guidance for promoting the social-emotional development of infants and toddlers.* Washington, DC: Zero To Three Press.
- Pianta, R. C., Hamre, B.K., Hadden, D. S. (2012). Scaling up effective professional development. In C. Howes, B.K. Hamre, & R.C. Pianta (Eds.). *Effective early childhood professional development: Improving teacher practice and child outcomes* (pp. 191-212). Baltimore, MD: Paul H Brookes.
- Pop V.J., Brouwer, E.P., Vader, H.L., Vulsma T., Van Baar, A.L., & De Vijlder, J.J. (2003). Maternal hypothyroxinemia during early pregnancy and subsequent child development: a 3-year follow-up study. *Clinical Endocrinology*, *59*, 282-288.
- Porter, T., Bromer, J., & Moodie, S. (2011). Quality rating and improvement systems (QRIS) and family-sensitive caregiving in Early Care and Education Arrangements: Promising Directions and Challenges, Research-to-Policy, Research-to-Practice Brief OPRE 2011-11d. Washington, DC: Office of Planning, Research and Evaluation. Administration for Children and Families, U.S. Department of Health and Human Services.
- Powell, D., & Dunlap, G. (2010). Family-Focused Interventions for Promoting Social-Emotional Development in Infants and Toddlers with or at Risk for Disabilities. *Roadmap to Effective Intervention Practices #5*. Tampa, Florida: University of South Florida, Technical Assistance Center on Social Emotional Intervention for Young Children.
- Roggman, L. A., & Boyce, L. K., & Innocenti, M. S. (2008). *Developmental parenting: A guide for early childhood practitioners*. Baltimore: Paul H. Brookes.
- Roizen, N. J., & Johnson, D. (2008). Congenital infections. In P. J. Accardo (Ed.), Capute and Accardo's neurodevelopmental disabilities in infancy and childhood (pp. 175-193). Baltimore: Paul H. Brookes.
- Sandall, S. R., & Schwartz, I. S. (2008). *Building blocks for teaching preschoolers with special needs* (2nd ed.). Baltimore, MD: Paul H. Brookes.
- Shonkoff, J. P., & Phillips, D. A. (2000). *From neurons to neighborhoods*. Washington DC: National Academy Press.
- Snyder, P. (2006). Best available research evidence: Impact on research in early childhood. In V. Buysse & P. Wesley (Eds.), *Evidence-based practice in the early childhood field* (pp. 35-70). Washington DC: ZERO TO THREE Press.
- Snyder, P., & Wolfe, B. (2007). The big 3 process components in early childhood professional development: Needs assessment, follow-up, and evaluation. In P. Winton, J. McCollum, & C. Catlett (Eds.), *Preparing effective professionals in early childhood*. Zero to Three Press.
- Snyder, P., Hemmeter, M. L., & McLaughlin, T. (2011). Professional development in early childhood intervention: Where we stand on the silver anniversary of PL 99-457. *Journal of Early Intervention*, 33(4), 357-370.
- Squires, J., & Bricker, D. (2007). An activity based approach to developing young children's social—emotional competence. Baltimore: Paul H. Brookes.
- Stahmer, A. C. (2007). The basic structure of community early intervention programs for children with autism: Provider descriptions. *Journal of Autism and Developmental Disorders*, *37*, 1344-1354.

- Strain, P. S., & Bovey, E. H. (2011). Randomized, controlled trial of the LEAP model of early intervention for young children with autism spectrum disorders. *Topics in Early Childhood Special Education*, 31, 133-154.
- Strain, P., Schwartz, I. S., & Barton, E. E. (2011). Providing interventions for young children with autism: What we still need to accomplish. *Journal of Early Intervention*, *33*, 321-332.
- Trivette, C. (2007). Influence of caregiver responsiveness on the development of young children with or at risk for developmental disabilities. *Winterberry Research Syntheses*, 1(12), 1-13.
- U.S. Department of Health and Human Services. (2010). Agency for Healthcare Research and Quality. Health Care for Minority Women: Recent findings. Retrieved from http:// http://www.ahrq.gov/research/minority.htm.
- Winickoff, J., Van Cleave, J., Oreskovic, N. (2010). <u>Tobacco Smoke Exposure and Chronic Conditions of</u> Childhood. *Pediatrics*, *126*(1), 251-52.
- Winton, P. J., & McCollum, J. A. (2008). Preparing and supporting high quality early childhood practitioners: Issues and evidence. In P. J. Winton, J. A. McCollum, & C. Catlett (Eds.), *Practical approaches to early childhood professional development: Evidence, strategies, and resources* (pp. 1–12). Washington, DC: Zero to Three.
- Wolery, M. (2005). DEC recommended practices: Child-focused practices. In S.Sandall, M.L. Hemmeter, B. Smith, & M. McLean (Eds). *DEC recommended practices: A comprehensive guide for practical application in early intervention/early childhood special education*. Missoula, MT: DEC.
- Wolery, M. & Hemmemter, M. L. (2011). Classroom instruction: Background, assumptions, and challenges. *Journal of Early Intervention*, *33*, 371-380.